

In The Claims:

Please cancel claims 17-19 and 21-31 without prejudice to or disclaimer of the subject matter contained therein. Claims 17, 18, and 28-31 are cancelled because they are drawn to a non-elected invention.

Please add new claims 32-59

32. A method for modulating the activity of a polypeptide comprising the amino acid sequence shown in SEQ ID NO:1; the method comprising contacting the polypeptide with a compound under conditions that allow the compound to modulate the activity of the polypeptide to thereby modulate the activity of the polypeptide, wherein the activity of the polypeptide is modulated in a cell selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.

Bg 33. The method of claim 32, wherein said compound is an antibody.

34. The method of claim 32, wherein said cell is a brain cell.

35. The method of claim 32 wherein the activity of the polypeptide is modulated in a subject having a disorder associated with hyperplasia or inflammation.

36. The method of claim 32, wherein said activity is a G-protein mediated signal transduction activity.

37. A method for modulating the activity of a polypeptide comprising an amino acid selected from the group consisting of:

(a) the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal

transduction activity and has at least about 70% sequence identity with the amino acid sequence shown in SEQ ID NO:1;

(b) the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal transduction activity and has at least about 80% sequence identity with the amino acid sequence shown in SEQ ID NO:1;

(c) the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal transduction activity and has at least about 90% sequence identity with the amino acid sequence shown in SEQ ID NO:1;

the method comprising contacting the polypeptide with a compound under conditions that allow the compound to modulate the activity of the polypeptide to thereby modulate the activity of the polypeptide, wherein the activity of the polypeptide is modulated is in a cell selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.

cn³
B₈

38. The method of claim 37, wherein said compound is an antibody.

39. The method of claim 37, wherein said cell is a brain cell.

40. The method of claim 37 wherein the activity of the polypeptide is modulated in a subject having a disorder associated with hyperplasia or inflammation.

41. The method of claim 37, wherein said activity is a G-protein mediated signal transduction activity.

42. A method for modulating the activity of a polypeptide comprising the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said

sequence variant has G-protein mediated signal transduction activity and is encoded by a nucleotide sequence that hybridizes to the nucleotide sequence shown in SEQ ID NO:2 under stringent conditions comprising hybridization in 6X SSC at about 45°C followed by one or more washes in 0.2X SSC/0.1%SDS at 50-65°C; said method comprising contacting the polypeptide with a compound under conditions that allow the compound to modulate the activity of the polypeptide to thereby modulate the activity of the polypeptide, wherein said modulation is in a cell selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.

43. The method of claim 42, wherein said compound is an antibody.

44. The method of claim 42, wherein said cell is a brain cell.

45. The method of claim 42 wherein the activity of the polypeptide is modulated in a subject having a disorder associated with hyperplasia or inflammation.

46. The method of claim 42, wherein said activity is a G-protein mediated signal transduction activity.

47. A method for modulating the activity of a polypeptide comprising the amino acid sequence set forth as amino acids 6 to 370 of SEQ ID NO:1; said method comprising contacting the polypeptide with a compound under conditions that allow the compound to modulate the activity of the polypeptide to thereby modulate the activity of the polypeptide, wherein said modulation is in a cell selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.

48. The method of claim 47, wherein said compound is an antibody.

49. The method of claim 47, wherein said cell is a brain cell.

50. The method of claim 47 wherein the activity of the polypeptide is modulated in a subject having a disorder associated with hyperplasia or inflammation.

51. The method of claim 47, wherein said activity is a G-protein mediated signal transduction activity.

52. A method for identifying a compound that modulates the activity of a polypeptide comprising the amino acid sequence shown in SEQ ID NO:1; the method comprising contacting a cell expressing the polypeptide with a test compound under conditions such that the test compound can modulate the activity of the polypeptide and assessing the activity of the polypeptide to thereby determine if the test compound is a compound that modulates the activity of the polypeptide, wherein the cell is selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.

53. The method of claim 52 wherein the activity of the polypeptide that is modulated is G-protein-mediated signal transduction activity.

54. A method for identifying a compound that modulates the activity of a polypeptide comprising an amino acid sequence selected from the group consisting of:

(a) the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal transduction activity and has at least about 70% sequence identity with the amino acid sequence shown in SEQ ID NO:1;

(b) the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal

transduction activity and has at least about 80% sequence identity with the amino acid sequence shown in SEQ ID NO:1;

(c) the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal transduction activity and has at least about 90% sequence identity with the amino acid sequence shown in SEQ ID NO:1;

the method comprising contacting a cell expressing the polypeptide with a test compound under conditions such that the test compound can modulate the activity of the polypeptide and assessing the activity of the polypeptide to thereby determine if the test compound is a compound that modulates the activity of the polypeptide, wherein the cell is selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.

55. The method of claim 54 wherein the activity of the polypeptide that is modulated is G-protein-mediated signal transduction activity.

56. A method for identifying a compound that modulates the activity of a polypeptide comprising the amino acid sequence of a sequence variant of the amino acid sequence shown in SEQ ID NO:1, wherein said sequence variant has G-protein mediated signal transduction activity and is encoded by a nucleotide sequence that hybridizes to the nucleotide sequence shown in SEQ ID NO:2 under stringent conditions comprising hybridization in 6X SSC at about 45°C followed by one or more washes in 0.2X SSC/0.1%SDS at 50-65°C the method comprising contacting a cell expressing the polypeptide with a test compound under conditions such that the test compound can modulate the activity of the polypeptide and assessing the activity of the polypeptide to thereby determine if the test compound is a compound that modulates the activity of the polypeptide, wherein the cell is selected from the group consisting of brain cells, spleen cells, lung cells, kidney cells, skeletal muscle cells, liver cells, and heart cells.